Law Firms Competing on the "Edge of Chaos": Pro Bono's Role in a Winning Competitive Strategy

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I. “THE GREAT RECESSION” AND THE LEGAL INDUSTRY ........................................2
II. THE RISE OF COMPETITIVE STRATEGY ..............................................................4
III. THE LAW FIRM STAFFING MODEL ..................................................................6
   A. The “Five Competitive Forces” in the Legal Industry ..................................6
   B. Early Moves Toward Strategy .................................................................9
IV. GAME THEORY ..................................................................................................10
   A. Game Theory Background .................................................................10
   B. Foundation and Assumptions ..............................................................11
   C. Examples ....................................................................................................12
      i. The Prisoners’ Dilemma ........................................................................12
      ii. Matching Pennies .............................................................................13
      iii. Cooperation .....................................................................................15
   D. Some Specific Law Firm “Games” ..........................................................16
      i. Mergers ...............................................................................................16
      ii. Synergy .............................................................................................16
      iii. Oligopolistic pricing ........................................................................18
   E. Judo Economics ..........................................................................................21
   F. Pro Bono as a Screening Mechanism ....................................................22
   G. Conclusions from Game Theory Analysis ..............................................23
      i. Mergers ...............................................................................................23
      ii. “Partial” mergers ..............................................................................24
      iii. Pro Bono as a paredo improvement externality ............................24
      iv. Cooperation ......................................................................................25
V. TRANSLATING ORGANIZATIONAL OPTIMIZATION TO A COMPETITIVE EDGE 25
   A. Resource-Based View; Core Competencies ...........................................25
   B. Valuable resources—V.R.I.N. Resources & Core Competencies ..........26
   C. Lateral Hiring to Enhance a Law Firm’s Competencies ..........................26
   D. Changes in the Legal Industry Outpace the Resource Based View ....27
VI. COMPETING ON THE EDGE OF CHAOS ..........................................................27
   A. What (or Where) is the Edge of Chaos? ...............................................28
B. Key Features of a Complexity Strategy ...................................................29
C. Examples ..................................................................................................29
   i. Biological Strategy ..........................................................................29
   ii. The Grateful Dead ........................................................................30
D. Law Firms, Pro Bono, and the Complexity Theory Framework ..........31
E. Pro Bono’s Critical Role in Complexity Theory ..................................31
   i. Pro Bono as a cost effective probe .................................................32
   ii. Creative externality ........................................................................32
   iii. Recombination, unity of effort ......................................................32
CONCLUSION .............................................................................................32

INTRODUCTION

Lawyers generally love pro bono. The work is usually rewarding, interesting and almost always has an immediate, demonstrable, and profound effect on a client or community. For years, however, there has been a somewhat uncomfortable dichotomy between law firm profits and altruistic pursuits. While many now agree that lawyers should do pro bono, advocates sometimes struggle to create arguments of the benefits that fit within traditional law firm strategic plans and performance metrics. This Note argues¹ that a robust pro bono practice can play an extremely valuable role in a law firm’s future strategy. First, however, law firms must embrace modern developments in strategic thinking.

I. “THE GREAT RECESSION” AND THE LEGAL INDUSTRY

For several weeks each fall, at law schools around the country, students beginning their second-year of legal study wander the halls in freshly pressed suits, carrying crisp copies of their resume. For decades, the nervous energy that on-campus interviewing creates quickly yields to excitement as the halls fill with discussions about which job offer, of many, to choose.²

In 2008, the world changed. The dream of guaranteed salaries large enough to comfortably cover three years worth of educational expenses evaporated as the world sank into the clutches of the worst recession since the great depression.³ The legal sector has suffered significantly as “recession-proof” legal qualifications have lost much of their luster. Even at elite law schools, where “BigLaw”¹⁴ jobs were all but guaranteed two years ago, the halls are

¹ Whenever possible, I will use quantitative methods, but often with simplifying assumptions.
⁴ When I say “BigLaw” or “large law firm,” I am generally referring to the Amlaw 100, or firms with more than four-hundred attorneys. The Am Law/100 2009, AM. LAWYER.COM,
filled with terror and disillusionment as the realities of crushing debt and limited employment prospects sink-in.\(^5\)

The scene outside the academic ivory towers is not much better. Law firms who expanded relentlessly and bragged of record profits year after year have dramatically scaled back to cut costs.\(^6\) Nearly every firm in the country, regardless of whether they laid off attorneys, deferred their incoming associates for several months.\(^7\) The legal industry’s recruiting and hiring schedule, once so dependent on rigid timing and lock-step yearly advancement, has become increasingly uncertain. The backlog of attorneys eager to start their careers will have lingering effects as deferment plans ripple through the next generations. The newly minted lawyers lucky enough to find job have been left guessing when they will actually begin their careers, sometimes moving and beginning hefty rent payments without a guarantee of when they can begin earning a salary.\(^8\)

Even partners, those gifted few who snagged the brass-ring, have not weathered the storm unscathed. At many of the most prestigious firms, profits-per-partner, the quintessential law-firm bragging-right, have fallen significantly.\(^9\) To buoy these numbers, some firms have resorted to reducing their partner head-count by forcing retirement and reducing non-equity partners. Firms have even gone so far as to dethroning the pinnacle of law firm achievement – by firing equity partners.\(^10\)

For those reading this Note, none of these new realities come as a surprise. I am not writing to reinforce the fears and apprehensions sweeping the legal industry. Rather, I want to discuss how the progress that law firms made in encouraging pro bono work during “the good times” must not wither during the difficult road ahead. Instead, as the economic crisis has forced law firms to consider their future competitive strategies, pro bono can fill a critical role in the industry’s recovery. Combining legal, microeconomic, and management

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strategy analysis, I will analyze law firms as strategic companies and consider the many possible futures for the law firm staffing model, and why a robust pro bono practice can (and I contend must) integrate seamlessly into a law firm’s long-term strategy.

In Part II, I will discuss the development of competitive strategic modeling. In Part III, I will discuss the history of the large law firm hiring and staffing model in the context of traditional strategies, and why it has begun to fade to obsolescence. I will also discuss the pressures and strategic challenges in the economy that have necessitated fundamental changes in the big firm model. I will discuss how these challenges have strained commitments to pro bono work. In Part IV, I will introduce Game Theory, and discuss some key insights that can be learned when applying this theory to law firm strategy. In Part V, I will turn to look at the internal structures of law firms in terms of strategic resources and applying evolutionary organizational theory to consider how a firm can optimally organize internally. Finally in Part VI and VII, I will discuss a new strategic model, Complexity Theory, which fits the law firm model particularly well. Within each of these frameworks, I will show how law firms can (and should) use a robust pro bono practice as an important competitive tool.

II. THE RISE OF COMPETITIVE STRATEGY

Surprisingly, having a true “strategy” is a relatively recent phenomenon in major companies. Modern organizational scholars initially focused their research on methods to improve a company’s internal operational efficiency. As companies poured resources into optimizing their operational effectiveness, their marginal returns diminished as massive investments yielded only minimal process improvements. In the 1970s and 80s, Japan mastered efficient practices, and rose to dominate the increasingly globalized manufacturing sector. Simply improving efficiency, however, is not a strategy. Efficiency improvements only focus within a company, and generally ignore a company’s place in an industry – a key element to true strategy. By the time the 90s arrived, the weakness of simply focusing on efficiency improvements became apparent as the Japanese economy collapsed through numerous mutually destructive price-wars not tied to actual value propositions.

At the dawn of the digital age, improving operational efficiency no longer served as a viable way for companies to create and sustain value. Rather, increasingly perfect competitive forces required any company to continuously operate on the “efficient frontier” – operating efficiently at all times for their given product type. (Figure 1) Competitors quickly replicate any efficiency

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13 Id. at 63-64.
14 Id.
innovations, thus eliminating any temporary advantage gained by process improvements. Furthermore, a company can only improve to the efficiency frontier. At that point, it achieves maximum efficiency for current technology, and cannot gain further long-term advantage. As technology improves, the efficiency frontier shifts outward, but uniformly.

Figure 1 – The Efficient Frontier

In this increasingly competitive atmosphere, companies no longer gain an advantage by merely improving efficiency; they must create true strategies to deliver something different to their customers. This difference creates value that customers are willing to pay for. Furthermore, companies can no longer simply focus internally to create value; they must consider every action in context of their competitors’ likely courses of action.

Modern strategies arise from recognizing and exploiting opportunities. While there are countless methods to analyze and evaluate different strategies, I will focus first on a firm’s external relationships, then I will turn to look at internal structures. Two modern strategic models, Game Theory and the new “Complexity Theory,” recently developed by Stanford University researchers perfectly fit the legal industry. While the Complexity Theory model has heretofore been applied only to “traditional” company types, particularly in the high-technology sector, I have found that law firms are structured to almost perfectly fit this model. Further, I contend that by using these strategies, firms

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15 *Id.*

16 *See Id.* at 62-63.

17 *Porter, supra* note 12, at 62.

can dramatically increase their success while simultaneously increasing their pro bono commitments.

III. THE LAW FIRM STAFFING MODEL

The law firm model that dominated the industry prior to the recession, referred to as either “leveraged” or more unflatteringly the “pyramid model,” began as an apprenticeship approach to legal practice. A descendent of the professional apprenticeship model common to many industries before the industrial revolution, this training method survived from the Middle Ages to today.19

In 1960, the average size of the largest fifty law firms in New York was 45 attorneys20, a mere fraction of some of today’s “mega” firms. As law firms expanded, the traditional apprenticeship model transformed into what many now call the “leveraged” model. In these firms, partner to associate ratios are significantly bottom-heavy with numbers of eight to nine associates for every partner. Although this structure supports large profits for those lucky enough to rise to partnership, it has destroyed the process of personal, apprenticeship-like development and interaction between partners and associates. Many associates no longer feel as though partners invest time to train them as the next generation of firm leaders, but feel that they are merely cogs in a profit-generating machine. Many disillusioned associates have abandoned even the small possibility of partnership, and view their time at large law firms as a useful entry on their resume as they transition to smaller firms, in-house, or to other fields.

In this highly leveraged model, firms typically measure success only in terms of profits.21 While this metric can help in assessing a strategy, it provides an extremely limited and incomplete picture. Profits give only a narrow insight into a firms’ long-term success, and ignores other key variables such as the ability to anticipate competitors’ actions, the level of innovation, the firms’ internal organizational effectiveness, and other important indicators.

A. The “Five Competitive Forces” in the Legal Industry

It is useful to consider the historic law firm staffing model through the lens of traditional competitive strategy. In many ways, the obsolescence of the “leveraged” model parallels a shift away from outdated strategic frameworks

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and performance metrics. One of the most “traditional” strategies, the “Industry Structure Framework” considers a firm’s position relative to the industry it occupies.\textsuperscript{22} Using this framework, company leadership considers the company as an activity system made up of various inputs and corresponding outputs. The strategic framework generally considers five competitive forces in an industry that affect and stress the inputs and outputs of the company. The optimal strategy seeks to identify and exploit potential advantages for sustainable industry dominance.\textsuperscript{23}

In the Industry Structure Framework, a company analyzes the structure and slow changes in an entire industry and seeks to maintain a sustainable competitive advantage. A company measures its performance simply by profitability. To analyze an industry’s structure and identify opportunities, a company generally considers external pressures in terms of the “Five Competitive Forces.”\textsuperscript{24}

Forming a strategy as a set of responses to the shifting pressures of the five forces works effectively in relatively stable industries with a clear, slow rate of change. This generally described the legal industry prior to the recent economic crisis. With well established firms and relatively little change in the external pressures, each law firm could thoroughly analyze its place in the industry and formulate strategy at their leisure. This method of strategic development allowed for extensive planning and small changes, with little required emphasis.

\textsuperscript{22} See MICHAEL E. PORTER, COMPETITIVE STRATEGY 3 (1998).

\textsuperscript{23} \textit{Id.} at 34.

\textsuperscript{24} \textit{Id.} at 4.
on innovation. Dominant firms, therefore, could sustain their advantage by maintaining their market positions. Increases in profitability came from incremental growth in the economy in general, increasing leverage ratio within the firms, and from merging to form increasing synergies and economies of scale. The law firm hiring process, with extremely long lead times between hiring decisions and market conditions, functioned relatively well because of this slow change environment.

One reason that most firms did not prioritize a robust pro bono practice during the past involves the stability of the legal industry. Since firms jockeyed for long-term industry dominance, measured by profits, pro bono did not fit well within the Industry Structure Framework. Without an easily observable contribution to “the bottom line,” firms often relegated their pro bono practices to marketing tools, underestimating their true strategic value. Even at the height of the economy, firms, still focused on profits as their key performance metric, rarely treating pro bono as much more than an advertising or recruitment tool – an expense rather than an asset. The increased commitment to pro bono in the 90s seems to generally reflect more of an inherent enjoyment in altruistic pursuits rather than a recognition of pro bono’s true value and a shift in strategy.

What a difference a year makes. In the legal industry, a five forces analysis no longer provides a particularly useful tool for forming strategy. While the industry managed to thrive on this deliberate planning process into the 21st Century, these days are at an end. With technology rapidly infiltrating all aspects of legal practice, law firms must adapt to a more agile method of strategy development. The recent pressures have pushed from all sides: From the supply-side, an ever-increasing number of law schools have produced many more graduates than are necessary to accomplish the legal work available. Lexis and Westlaw have created programs that enable law firms to operate more efficiently and cheaply, with relatively low start-up costs. On the buyer’s side, clients have started to cut costs and bring much of their legal work in-house. Substitutes to BigLaw firms have appeared, providing an increasingly

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25 Evidenced by the decline in pro bono work after the recession in the 1990s. See Greg Winter, Legal Firms Cutting Back on Free Services for Poor, NY TIMES, at A1, Aug. 17, 2000.
broad array of pricing models, and technological alternatives. Finally, barriers to entry have eroded as technology has enabled even the smallest law firms to operate in the legal market effectively. In the face of this torrent of accelerating changes, to survive a law firm must become more agile. Those that do not embrace this change will be forced to constantly react to their more innovative peers, and ultimately lose market share.

B. Early Moves Toward Strategy

Several firms have recognized the necessity to change strategy. Currently, however, these changes reflect a reaction to the industry climate and a response to traditional five-forces. Most firms generally seem to be shifting to one of three new “generic” strategies. First, some are adopting a “training” periods, where associates are paid less, but focus their time training, rather than performing work for clients. Second, other firms have adopted a “merit-based” system of promotion for their associates. Third, some firms have carried on their current “lock-step” system, but with significantly fewer staff-members. While none of these models are necessarily wrong, they are simply reactive to the pressures in the industry and will not lead to long term competitive advantage. Simply restructuring advancement, billing, and staffing decisions cannot, in isolation, make a firm more strategic. Instead, firms should take a holistic approach to strategy – using Game Theory to anticipate their competitors’ moves and taking the appropriate response, and using Complexity Theory to optimize internal organizations.

As recently as 2008, two Stanford Law School students, Andrew Cantor and Andrew Bruck, along with many other legal analysts predicted the death of the Billable-Hour. The reports of its death have been greatly exaggerated. But why? The resilience of the paradigmatic billable-hour structure in law firms stems from the fact that firms have not recognized that their strategy must fundamentally change by embracing modern strategic frameworks. For the rest of this Note, I will discuss how law firms can implement these modern

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32 Andrew Cantor & Andrew Bruck, Supply, Demand, and the Changing Economics of Large Law Firms, 60 STAN. L. REV. 2087 (2008).
strategies in their decision making in the new, fast-paced competitive legal-industry, and how pro bono can provide a key tool to this success.

IV. GAME THEORY

Game Theory provides a very useful tool to analyze law firm strategy. The theory began, logically, as a mathematical theory to describe games. A “game” is simply a series of strategic moves exchanged between a group of players seeking to win by maximizing their utility. Game theory differs from other strategic frameworks by focusing on strategic decisions in the context of other players’ decisions. In other words, a company seeks to find an optimal strategy by not only making the right moves, but making the right moves in anticipation of competitors’ moves. This framework largely ignores the internal company organization, and assumes that a company can effectively execute its decisions.34

Game theory applies particularly well to law firms because the legal industry is, in the aggregate, generally oligopolistic. This allows us to satisfy the key conditions which make Game Theory predictions accurate – relatively few, known, and equally powerful players, with common knowledge of each others’ payoff and decision set.35

A. Game Theory Background

At the beginning of the Industrial Revolution, mathematicians sought to use their skills to quantify social behavior. Early Game Theory models first emerged in 1838 when Antoine Augustin Cournot applied mathematical economic analysis to behavioral science when considering duopoly behavior.36 He theorized that a “Cournot Equilibrium” occurred when each player in an oligopoly maximizes profits given its competitors’ outputs.37

Mathematics and social science became even more intricately intertwined when John von Neumann and Oskar Margenstern published their masterpiece “The Theory of Games and Economic Behavior” in 1944.38 This contribution expanded the concept of equilibrated strategic decisions when choices are not simply binary (or “pure”), but are series of probability distributions from which

34 I will relax this assumption and consider internal organizational optimization in Parts V, VI, and VII, infra.
36 See AUGUSTIN COURNOT, RECHERCHES SUR LES PRINCIPES MATHEMATIQUES DE LA THEORIE DES RICHESSES (1838).
37 This simple form of Game Theory later became incorporated into the modern Nash Equilibrium as the “pure-strategy Nash Equilibrium.”
38 JOHN VON NEUMAN & OSCAR MARGENSTERN, THEORY OF GAMES AND ECONOMIC BEHAVIOR 65 (1944).
a player may choose.\textsuperscript{30} They revealed that for any zero-sum game, an
equilibrium of optimal moves for all players will exist.\textsuperscript{31}

The most famous Game Theorist, John Nash (portrayed in the popular
2001 film, \textit{A Beautiful Mind}), further expanded the theory in his 1951 article,
\textit{Non-Cooperative Games}, which postulated that for \textit{any} mixed-strategy game
with a finite series of moves,\textsuperscript{41} at least one equilibrium always exists.\textsuperscript{32} At a
Nash Equilibrium, no player can place itself in a better position by unilaterally
altering its position. Thereafter, the situation remains at the Nash Equilibrium.

Game Theory has become increasingly complex, occasionally garnering
criticism when economics seek to use its predictive power in overly complex
systems.\textsuperscript{43} For this Note, however, I will stay in a relatively simple (and
demonstrable without the aid of a computer) realm. This level of approach still
provides insight into optimal law firm strategy.

\section*{B. Foundation and Assumptions}

Understanding Game Theory begins with a series of terminology:

- There are players, \( t \), in the game, and \( t \in N = \{1, \ldots, n\} \)
- There are \( A_t \) strategy spaces, with elements \( a_t \in A_t \)
- Payoffs for individual firms are given as \( u_t(a_t) \), where:
  \[ a = (a_1, a_n) \in A = A_1 \times \cdots \times A_n \]

and
\[ a_{-t} \in A_{-t} = A_2 \times \cdots \times A_{t-1} \times A_{t+1} \times \cdots \times A_n \]

- For mixed-strategies, \( \sigma_t \in \Delta(A_t) \) and \( \sigma_{-t} \in \Delta(A_{-t}) \)

\textsuperscript{30} Id.
\textsuperscript{31} Id.
\textsuperscript{41} This theory can be further complicated if one considers the difference between moves
with finite and infinite moves. For finite moves, cooperative behavior always ends on the
last move when both players will shift to their Nash Equilibrium. For infinite moves, players
can maintain their cooperative stance, using threat of deviation as an externality to maintain
the “better” equilibrium. One can argue that every game (or interaction) has infinite moves
because there is always a chance of meeting the player again in the future and “playing”
again. In that case, one can add an additional discount factor to measure the probability of
meeting the player again. The strategic move then moves back to a cooperative equilibrium
if the chances of meeting again are high enough. Some theorize that this is the reason for
“Good Samaritan” behavior. Tom Siegfried, \textit{A BEAUTIFUL MATH: JOHN NASH, GAME
THEORY, AND THE MODERN QUEST FOR A CODE OF NATURE} 86 (2006). One could write an
interesting follow-up to consider the mathematical link between this discount factor and
altruistic work such as pro bono.

\textsuperscript{42} Nash won the Nobel Prize in 1994 for this contribution. See \textit{Les Prix Nobel, The
Nobel Prizes} 1994 (Tore Frangsmyr, ed. 1995).

\textsuperscript{43} One final note, Game Theory sometimes seems paradoxical because the solutions
are often not Pareto Optimal, that is, it is possible for both players to be in a better position
without necessarily making one of the players worse off.
• A normal-form game function, $\Gamma_N$, is given as:

$$\Gamma_N = \{N, \{A_i\}, \{u_i(\cdot)\}, i \in N$$

This expression represents a set of players, strategic spaces, and payoffs.

And Assumptions:

• All players are rational (they want to maximize their utility).
• Every player knows the rules of the game and each player knows that every other player knows the rules of the game (action sets and payoff functions are common knowledge).

A Nash Equilibrium is defined as the condition where no player in the game has a better position relative to the other players’ decisions. In other word, any move away from the Nash Equilibrium would put a player in a worse position.

C. Examples

Game Theory becomes clearer when considering a few examples. As an introduction, I will start will simple, pure-strategy games, then move on to non-cooperative mixed-strategy and discuss how this model can aid in forming law firm strategy.

i. The Prisoners’ Dilemma

Since this is a legal Note, it seems fitting to start with the classic “prisoners’ dilemma” game. Consider a situation where the police question two suspects separately about a recent robbery. If both confess, they each receive five year sentences. If both deny, they each receive one year sentences. Finally, if either confesses, they are released, and the other suspect receives a ten-year sentence. This “payoff” matrix can be displayed as follows:

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44 This chain of inferences is infinite. If there is a break in this infinite belief hierarchy, one could get very different outcomes.
Each suspect has a single, dominant strategy in response to the other’s action. If Bonny denies, then Clyde’s best response is to confess. If Bonny confesses, Clyde’s best response is also to confess. The same logic applies for Bonny’s responses to Clyde’s actions. Therefore, regardless of one suspect’s action, the other should always confess to maximize their likely payoff. This is the pure-strategy Nash Equilibrium. Neither player can improve their position by shifting from this strategic position. Note that this equilibrium does not achieve social optimization; both suspects could maximize their welfare by agreeing to deny. However, as we will see later, for finite games, this cooperative equilibrium cannot persist – the players will gravitate toward their non-cooperative Nash Equilibrium for all finite games. In other words, players are trapped in a non-socially-optimal Nash Equilibrium.

ii. **Matching Pennies**

Next, let us go beyond a simple pure-strategy, to discuss mixed-strategy. This type of game more adequately models real-world scenarios, where a company must make choice based on a stochastic distribution of possible competitor actions. This type of non-cooperative game will give important insights on the legal industry as an oligopoly.

Consider a game with two players, Claire and Tom. \( N = \{\text{Claire, Tom}\} \). Each player has two choices, heads or tails \( A_i = \{H, T\}, i \in N \). The payoff matrix, \( u_i(\cdot) \) is given as follows:

<table>
<thead>
<tr>
<th></th>
<th>Confess</th>
<th>Deny</th>
</tr>
</thead>
<tbody>
<tr>
<td>Confess</td>
<td>((-5, -5))</td>
<td>((-10, 0))</td>
</tr>
<tr>
<td>Deny</td>
<td>((-10, 0))</td>
<td>((-1, -1))</td>
</tr>
</tbody>
</table>

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45 Thomas A. Weber provides an excellent presentation of these game examples in his class “Economic Analysis,” MS&E 241, available through Stanford University’s “Stanford Center of Professional Development.”
Here, there are two pure-strategy equilibriums, one where Claire and Tom each choose Heads, and one where they both choose Tails. Shifting to a mixed-strategy version of this game, where the choices are based on a probability density function (let the likelihood that Claire chooses $H = p$ and the likelihood that she chooses $T = (1 - p)$ (and the same for Tom using $q$ as the probability). Therefore, Claire’s expected payoff will be:

$$\pi_C = p(1 - q) \cdot 2 + (1 - p)q \cdot 1$$

Solving for the first-order condition to maximize $\pi_C$ in terms of Tom’s decision,

$$\frac{\partial \pi_C}{\partial q} = 2(1 - q) - q = 2 - 3q$$

So, if $q < \frac{2}{3}, p = 1; q > \frac{2}{3}, p = 0$; and if $q = \frac{2}{3}, p \in [0,1]$. Graphically:

We can see from the graph that Claire’s best decision depends on the probability of Tom’s choice. If there is more than a $\frac{2}{3}$ chance that Tom will play heads, then Claire’s best response is to also play heads. Likewise, if there is
less than a \( \frac{2}{3} \) chance, then Claire’s best response is to play tails. Performing a similar analysis for Tom, we see that the two utilities cross at \( \frac{2}{3} \). Therefore, at equilibrium, both Tom and Claire will choose a probability distribution of \( \frac{2}{3} \) -- the mixed-strategy Nash equilibrium. This non-cooperative equilibrium will remain intact for all finite series of interactions.

iii. Cooperation

By cooperating, both Tom and Claire could both improve their payoff. This proposition translates well to law firm “games.” Within the payoff space, \((T_1, T_2)\), if Tom and Claire can agree on a choice of H or T, or if they agree to use an external random result generator (such as a coin-flip), they can push the game’s payoff to the frontier of the payoff space. These agreements are analogous to certain agreements, implicit or explicit, that many industries use. These constraints can benefit all of the firms within an industry. We can see the effects graphically:

By cooperating, the players can push their payoffs toward the boundary of the payoff space, increasing the overall welfare generated by the game. Industry players do not need to collude, or even communicate to achieve more optimal payoffs through cooperation (and thus will not violate anti-trust laws). Rather, by recognizing the operation of the game, firms can adjust their strategy to maintain their service in a mutually (and socially) beneficial region of the payoff curve, rather than enter a mutually destructive price-war. This type of cooperation, however, only works for games without a clear time-
horizon. For finite games, prior to the last move, each player will anticipate other players’ moves to optimize their payoffs and will take corresponding optimal positions, returning the industry to the Nash Equilibrium. Similarly, if any firm in the industry violates the rules of cooperation, the other players will follow suit, again returning to the less optimal non-cooperative Nash Equilibrium.

There are many mechanisms in place to engender cooperation amongst the law firm oligopoly. The very nature of the legal industry, with its high and costly barriers to entry creates the necessary conditions for an oligopoly. Additional external cooperation mechanisms, such as marketing rules or recruiting guidelines, help to maintain the improved equilibrium. These guidelines are only effective as long as all of the players play by these external rules; the first to deviate will force all of the players to retreat to the non-cooperative Nash Equilibrium.

D. Some Specific Law Firm “Games”

i. Mergers

For many years, law firms have turned to mergers, either through acquiring smaller firms, “poaching” practice groups or partners from their rivals, or combining with equally large competitors, to increase profits. However, two competitors simply merging cannot create value. Game Theory suggests two possible motivations for the persistent trend of law firm mergers.

a. Synergy

First, the merger can create a synergistic effect. Excluding the unquantifiable benefits of increased cooperation and interaction between professionals, I will consider an exemplary merger in terms of fixed cost, production, and pricing. To maintain generality, assume:

- A legal industry with \( N \) firms,
- Each firm chooses an output, \( q_i \), and the output of the industry is \( \sum_{i=1}^{N} q_i = Q \),
- Pricing is linear with \( p(Q) = A - B Q \), where \( A \) and \( B \) are generic constants,

\[\text{Principles and Standards for Law Placement and Recruitment Activities,Assoc. for}\]
\[\text{Legal Career Professionals, effective Feb. 25, 2010,}\]
\[\text{http://www.nalp.org/fulltextofnalpprinciplesandstandards.}\]
\[\text{These could be salaries, buildings, etc.}\]
\[\text{One could use several metrics to measure this such as hours, legal services, deal flow,}\]
\[\text{etc.}\]
\[\text{Again, several variables could be used here, such as billable hours.}\]
• Assume \( q \) for each firm is symmetric, \( q_i = q_1 = \ldots = q_N \).
• The per unit cost is constant, \( c(q_i) = Cq_i \), making marginal cost constant (\( C \)),
• And the fixed cost for each firm is \( F \).

Therefore, before fixed costs, a firm’s profit, \( \pi_i \), is:

\[
\pi_i(q, Q_{-i}) = (A - Bq_i - BQ_{-i} - C)q
\]

To find the firm’s best strategic position, we find the first-order condition,
\[
\frac{\partial \pi_i}{\partial q_i} = 0, \text{ to find optimal production to maximize profit:}
\]

\[
\frac{\partial \pi_i}{\partial q_i} = -2Bq + (A - BQ_{-i} - C) = 0; \text{ where } Q_{-i} = (N - 1)q
\]

Therefore at the optimal \( q \), \( Q^* = \frac{A-C}{B(N+1)} \). At this quantity, each firm will earn

\[
\pi_i(q^*, Q_{-i}^*) = \frac{(A-C)^2}{B(N+1)} \] in profit.

Using this expression, we can determine whether a prospective merger can improve the firms’ profits. When the firms merge, \( N \to N-1 \), so a merger only adds value if:

\[
2\pi_1(N) - 2F < \pi_1(N-1) - 1; \text{ or rearranged, } F > 2\pi_1(N) - \pi_1(N-1)
\]

A firm will therefore only benefit from a merger when the combined profits from the two firms exceed gains achieved by fixed cost savings. For example, assume a simplified market with \( A = 25, B = 1, C = 5 \) with 4 firms each with a fixed cost of 15. If two of the firms merge, the combined profits

\[
= \frac{(A-C)^2}{B} \left( \frac{1}{N+1} - \frac{1}{N^2} \right) = 7
\]

which is less than the fixed cost of 15, so the firms should not merge.

From the previous example, we have seen that firms may have an incentive to merge. This is certainly not a new insight, nor does it have much to do with an argument for pro bono. To make this connection, we must consider the effect of such a merger on the general welfare.

Welfare is defined as the sum of the industry’s profits, plus any consumer surplus minus fixed costs. This can best be described graphically:
When \( N \) decreases (and the industry becomes less competitive) the price increases (as firms are able to exert market power and hold back quantity), reducing consumers’ welfare. But, counter-intuitively, the general welfare can actually \textit{increase} because of some mergers. Take our previous example, where \( A = 25, B = 1, C = 5, F = 15 \), and \( N \) represents the number of firms in the industry:

\[
Q(N) = Nq^* = N \left( \frac{A - C}{B(N+1)} \right)
\]

\[
p(N) = p(Q(N)) = c + \frac{A - C}{N+1}
\]

The welfare value with three firms, \( W(3) = \frac{1}{2} (A - C + p(N) - C)Q(N) - F \cdot N \) is actually \textit{more} than that of four firms, \( W(4) = 132 \). This result comes from the fact that although consumers are worse off, the firms are so much better off from the reduction of fixed costs that overall welfare actually increases.

Firms can share at least some of this increase in welfare to offset some of the surplus captured through merging. Pro bono provides an excellent mechanism to share this welfare increase. Not only does pro bono work shift some of the producer surplus to consumers, it provides reciprocal internal benefits to the firm (described in more detail in Part VI). Therefore, one can argue that increasing pro bono work is actually a 	extit{pareto} improvement over a post-merger equilibrium—the general welfare does not decline by shifting surplus, but the law firm gains additional training advantage from the pro bono work.

\textit{b. Oligopolistic pricing}

The second possibility is not as savory as the first. By merging, firms gain market power leading the industry closer to the “M”-word—monopoly.
Although nearly anyone can recite the normative insight that monopolies are “bad,” it is helpful to consider why.

With perfect competition, a company has no market power; therefore, they can only charge the price that their competitors charge. Consumers capture all of the surplus utility, leaving firms with limited profits, only equal to their marginal cost. This fiercely competitive pressure encourages innovation as a firm can only increase profits by reducing their marginal costs.

A monopolist (or to lesser degree an oligopolist) has another, easier way to withdraw surplus from the market, she can artificially withhold production to charge a higher price. Depending on the elasticity of the good, the firm can charge significantly more than the competitive price. The Lerner index determines the extent of quantity (and thereby price) distortion that a monopolist can accomplish.

Turning again to the depiction of how price and quantity depict welfare, where C again represents a fixed per-unit marginal cost, and a linear price

![Graph showing Monopoly Price & Quantity vs. Competitive Price & Quantity]

Market power and monopoly pricing results in a dead-weight loss that society must bare. Although firms may gain valuable core competencies (discussed later), the consolidation of expertise and knowledge necessarily results in artificially withholding of quantity – resulting in higher costs. Pro bono can serve as a perfect offset to the damaging effects that increased market power and a more monopolistic industry creates.

Let us consider a firm that hires a practice group. After the merger, the combined firm will choose which and how many clients to serve together (production outputs), $q_1, q_2$. Let us assume that the unit production cost is $c$ (where $0 < c < 1$). We can represent the inverse demand function as $p(q_1, q_2) = 1 - q_1 - q_2$. Calculating the Nash Equilibrium for this merger:

$$\text{Profit} = \pi_2(q_2, q_1) = (p(q_2, q_1) - c)q_1 = (1 - c - q_1 - q_2)q_1$$
Optimizing $\pi$: \[
\frac{\partial (P_u Q_1 + P_l Q_l)}{\partial Q_1} = 1 - c - 2q_1 - q_l = 0 \] (concave)

The firm’s best response $q_1^*(P_l) = \frac{1-c-q_l}{2}$

Graphically:

After merging, each group shifts its output to $q_1^* = q_2^* = \frac{1-c}{2}$. So in summary, the monopoly quantity $= \frac{1-c}{2}$, the competitive quantity $= \frac{1-c-q_l}{2}$, and the post-merger Nash Equilibrium $= \frac{1-c}{2}$. So, when a firm absorbs a practice group, or merges with another firm, it can improve its market power, reduce quantity and charge higher prices.

This approach, however, only works if the new practice group perfectly integrates into the new firm. If integrated, then the firm can decrease quantity even further toward the monopoly quantity and pricing. If the group maintains autonomy (such as an acquired partner “hording” her clients) then each piece of the firm will retain an incentive to unilaterally increase production (moving vertically or horizontally on the graph) (in red) prompting an equal response from the rest of the firm until returning to the Post-Merger Nash Equilibrium (in blue).\textsuperscript{51}

This dead weight loss exists as a firm artificially lowers its output. By supplementing output (which is generally specific, and client driven) with pro bono work, (which is virtually unlimited) the firm can offset the dead weight loss that the merger creates. Pro bono work focuses on more general types of

\textsuperscript{51} This return to the Nash Equilibrium will occur through a series of unilateral actions regardless of the starting production level for each firm.
service, and can compensate for the consolidation of expertise after a merger or practice group absorption. The increase in pro bono, therefore, can offset some of the negative societal economic effects that a merger produces.

E. Judo Economics

Game Theory can also explain the increasing trend in recent law school graduates that have entered the market as solo practitioners. “Hanging a shingle” seems to provide a viable lifeboat to escape the turmoil of the legal industry. Unfortunately, however, Game Theory shows that in a well-established industry, this business model faces severe limitations.

An offshoot of Game Theory, Judo Economics postulates that for a limited number of “turns” a new player can enter the game at a strategy set not occupied by any other players. For a time, the dominant industry players will ignore the smaller entrant as an insignificant pressure to the equilibrium strategy. Over time, if the smaller player seeks to grow, it will necessarily begin to influence the large players’ strategy set. At that point, the larger player will alter their strategy to compete with the new entrant. This will likely not end well for the small player, as the large players have first-mover advantage. (Figure 3). In the long-run, therefore, unless solo practitioners do not seek to grow their business past a certain threshold, they will likely shift to the same equilibrium point as their larger competitors, but at the residual market share level provided by late-mover disadvantage.

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Although solo or small-firm practitioners can fill a gap left by large firms, in terms of pricing and types of service, they are not providing a truly differentiated “product.” Therefore, unless the industry expands, additional and identical competitors will fill the market with first-mover advantage.

On the other hand, public interest pro bono work serves clients that are by definition under-served by the legal industry. Neither large nor small firms view these organizations as “threats” under the Game Theory model, rather they can serve as valuable complementors useful in developing additional core competencies and skills. Instead of hanging a shingle and extracting residual market share, lawyers eager to leave the BigLaw game could therefore more effectively (in the aggregate) devote their efforts to public interest organizations.

F. Pro Bono as a Screening Mechanism

Although every lawyer strives to perform at their absolute best, legal work will necessarily have a certain quality level. In the aggregate, a brief proofread ten times will have more errors than one read one-hundred times. A firm cannot simply ask what level of quality that a consumer will accept for a given price. This information has value, enabling a consumer to capture part of the surplus in the industry; receiving more utility than their willingness to pay. To illustrate the value of this information, if a firm were able to do “first-order” price discrimination, charging exactly each client its exact willingness to pay, it could extract all of the surplus utility, in the form of profits, from each clients. While this approach would be efficient, with no wasted production or dead-weight loss, it is impossible, because a consumer will never willingly provide the exact amount they are willing to pay.

Instead, the best a firm can hope for is second-order price discrimination. Under this approach, a producer can design a screening mechanism by providing two different products to retrieve information about consumers’ preferences. Pro bono can provide a valuable screening mechanism to extract this preference and utility information.

Second-order price discrimination allows a firm to extract information from consumers by offering them choices of services based on a sorting

53 Discussed in more detail in Part VI, infra.
mechanism. By using this information, firms can set prices in order to extra revenue, originally part of the consumer surplus. The firm subsidizes non-paying clients to extract this info. This does not mean that a firm should provide lower quality work, rather it is in the firm’s best interest to minimize the quality gap between pro bono and for-profit work. (Figure 4)

The equations are beyond the scope of this Note, but displayed graphically, one can see that the maximum amount of information rent that a firm can extract results from minimizing the gap between the quality of paying and non-paying clients.

Figure 4: Quality Screening

Finding this optimal level is a valuable outcome from pro bono. Essentially, by not charging for the pro bono-type legal services, a firm subsidizes those clients, essentially paying for information instead of extracting this value directly from the lower service level consumers. Under the traditional strategy models, which measure only profit, this link is not obvious.

One might argue that this method would encourage firms to “skimp” on the level of service that they provide to their “non-paying” clients. On the contrary (and counter intuitively), a firm can maximize the information that it extracts by maintaining the quality as close as possible. Therefore, although pro bono represents the “lower-type” of service, the firm has an incentive to make the quality of pro bono and paid legal services as similar to the optimal level of service.

G. Conclusions from Game Theory Analysis

i. Mergers

Mergers can help a firm to create value, but only if the fixed cost savings justify the strategic move. Mergers work particularly well in industries with
high fixed costs. As firms struggle to reduce costs, mergers will become a less viable means of increasing profit through synergies. On the other hand, merging for the sake of merging does not create value, and can actually prove costly for a firm. Regardless, mergers have a negative effect on consumer surplus, despite sometimes having positive welfare effects.

Pro bono work provides as excellent way to offset some of the advantage that a firm absorbs from consumers (and society) by merging. This strategy does not imply a “share the wealth” requirement; rather pro bono work can split the welfare measures gained by merging with other portions of society rather than maintaining all of the surplus exclusively within the firm.

ii. **“Partial” mergers**

   An ineffective integration of the merged “components” leads to even worse results than a non-cost-effective merger. A partial merger may temporarily enable cooperation, leading to an improved Nash Equilibrium position for the firm, but this cooperation cannot last if the components remain fragmented. This gives the insight that if a firm annexes a practice group or firm, to see the benefits, it must effectively integrate the new members into the firm.

   I will discuss the mechanisms for internal organization in Part VI, but here it is important to note that pro bono can serve as a binding mechanism to draw the firm together, and maintain the improved Nash Equilibrium gained from the merger. After the firm fully integrates, the risk dissipates that various practice groups will have an incentive to act non-cooperatively, forcing the firm to return to the previous equilibrium.

iii. **Pro Bono as a pareto improvement externality**

   Once an industry reaches its Nash Equilibrium, it will remain in that position as long as the fundamental rules remain the same. Despite the rapid changes that are affecting the legal industry, the well-established players will continue to remain within the game. While firms continue to take the appropriate actions in response to their competitors, they will remain at the Nash Equilibrium – no firm will be able to improve its position by unilateral action.

   Pro bono, on the other hand, can serve as an externality to the game. By drawing on experience and expertise gained from serving pro bono clients, a firm can improve its position by leveraging its relationships and improving skills and innovation, without worsening competitors’ positions.

   This is a powerful argument for pro bono – the work does not reduce the general welfare improvement gained through a firm merger, it merely shifts surplus from producer to consumer. Simultaneously, the law firm benefits from increased training opportunities and the other internal organizational advantages discussed in Part VI.
iv. Cooperation

Forcing cooperation among industry players (sometimes disparagingly called collusion) only functions as long as all of the players agree to the external rules. As long as this cooperation exists, all firms in the industry can benefit from an improved mixed-strategy equilibrium. However, the mere “threat” of unilaterally retreating to the equilibrium position is often not enough to constrain the other players in the game. Several of these forced-cooperative mechanisms, such as the NALP recruiting guidelines, have fallen under significant scrutiny as the recent financial crisis arrived. However, these mechanisms can actually benefit all the players in the industry just as actions in other industries prevent “mutually-destructive” price wars.

Pro bono requirements, although currently only “recommended” by the ABA, can serve as an additional hedge on non-cooperative gaming in the industry. Shifting service from paying consumers to pro bono clients can serve as a relief valve for a mutually-destructive “race to the bottom.” Law firms can remain in a paraedo improved position within the industry, yet still increase services to improve lawyer skills.

V. TRANSLATING ORGANIZATIONAL OPTIMIZATION TO A COMPETITIVE EDGE

As discussed in the previous Part, law firms are running out of options to improve their strategic positions by focusing on external relationships among competitors. While some firms will enjoy continued success by focusing on their position in relation to their competitors, the true innovators will thrive in the fast-changing market of the future. To accomplish this innovative posture and gain a competitive edge, law firms should turn their focus internally – to optimize their internal structure. This optimization does not refer to the outdated operational efficiency dismissed in Part II, rather it focuses on innovative ways to structure a firm to take advantage of strategic opportunities.

A. Resource-Based View; Core Competencies

One of the more traditional internal organization strategic frameworks, the Resource-Based View, considers a company as a bundle of valuable resources. Each of these resources or skills contributes to the overall operational strategy of the company, ultimately leading to long-term industry dominance. Under this strategic view, a company need not focus on external

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pressures, but should seek to continually focus on and improve their core competencies, leading to sustainable advantage. With this constant focus on improving skill-sets, success comes in time as a company learns how to best deploy these assets.

For a skill to truly be valuable, it must set a firm apart. This view focuses internally; a firm decides where and how it can best leverage its valuable resources—not focusing on direct competition—but understanding that competitive success will arrive in time by building on these competencies. These “strategic resources” can take many forms, including physical (a manufacturing plant), intangible (patents), processes (engineering excellence), or intellectual (legal expertise in a certain area). But all have one aspect, V.R.I.N. (Valuable, Rare, Inimitable, Non-Substitutable), in common.

B. Valuable resources—V.R.I.N. Resources & Core Competencies

A company, or firm, consists of immeasurably diverse skills, talents, backgrounds, and experiences. To narrow a firm’s focus on the skills that play a critical strategic role, the Resource Based strategy focuses on expertise that are “VRIN.” These skills satisfy four key requirements represented by the VRIN acronym: 1) they are valuable (can give a competitive advantage in the firm’s competitive space), 2) rare (not possessed by all other players—gives this firm a unique advantage), 3) inimitable, and 4) non-substitutable (no substitute resource provides exactly the same functionality).

Over time, a firm can further refine its most valuable resources into a few “core competencies.” These competencies form the root of the company’s internal strengths—enablers that allow the company to excel in its core mission. Traditionally, firms have been able to nurture their VRIN resources into several core competencies to facilitate long-term dominance. Many firms are well respected as corporate or litigation “powerhouses.” Other firms have further specialized into boutiques, narrowly focusing on niche practices such as intellectual property or tax.

C. Lateral Hiring to Enhance a Law Firm’s Competencies

Within the legal industry, many law firms recognized the opportunities to grow their skills to gain a competitive edge. For example, the number of lateral hires has exploded during the last decade. While associates occasionally transferred between firms in the past, this practice has become common even

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57 Id. at 126-28.
58 Id. at 120-24.
among the partner ranks of major firms.\textsuperscript{60} This increased mobility can provide both challenges and opportunities for firms.

For many years, this approach has been very effective in slowly growing skills within a firm. However, these acquisitions only actually benefit a firm if the firm fully integrates the new hires into the culture. Many of the most “elite” firms have avoided this problem altogether by declining to hire laterals and instead growing talent form within the existing firm.

D. Changes in the Legal Industry Outpace the Resource Based View

Resource Based Theory provided useful strategic insight in the legal industry prior to the crisis. Law firms could acquire partners or practice groups to increase their skill-sets in increments in “hot” areas for practice. However, the legal market has undergone such rapid changes that it has outgrown the core competency model. If a firm focuses exclusively on developing resources and competencies, it can find itself left behind; outdated in a fast-changing industry. Furthermore, a firm may choose to focus on resources that are the most profitable in today’s market, investing extensive time and training in these areas, only to find that by the time they have the desired level of expertise, the market has shifted again. The time required to develop these competencies means that firms cannot anticipate the path the industry will take, but instead must rapidly change, adapt, and innovate to succeed.

As with the Industry Structure Framework, a Resource Based view also does not provide a terribly useful tool for those advocating a robust pro bono practice. While many advocates correctly argue that pro bono work can supplement a junior lawyer’s skills, growing intellectual resources within given practice groups. The fundamental legal skills that pro bono work provides fall short of satisfying the VRIN requirements. These skills may be valuable, but they are not rare, inimitable, or non-substitutable – lawyers can easily gain similar skills, often simultaneously earning money for the firm (even at substantially reduced billing rates). Under this model then, the pro bono advocate must once again argue the benefits of pro bono work at a disadvantage – creating creative arguments under performance metrics that favor paid work.

We should turn, therefore, to Complexity Theory – a more malleable approach that can adapt to the fast changes in the modern legal industry.

VI. COMPETING ON THE EDGE OF CHAOS

Thinking about a law firm’s organizational structure as a parallel to biological functions seems very odd at first glance. As Part IV demonstrated, mathematics neatly explains the interaction between various pieces and forces
throughout the industry. But how can the same theories that explain cellular growth or flight patterns of flocks of birds provide insights to law firm organizational optimization?

While mathematical analysis provided relatively rigid analytics, Complexity Theory treads a narrow line between balance and chaos. The link between biological systems and organizational behavior arises primarily from the space in which each operates. Systems in nature must rapidly adapt and shift strategy to survive; gaining success not from long-term dominance, but from an iterative series of small wins. Similarly, in fast changing and innovative industries, the competition space changes rapidly. To survive in such an environment, a firm must be able to rapidly evolve and innovate to changes in market conditions.

This iterative, evolving strategy comes from a fragile balance between structure, which allows for planning and execution, and chaos, which allows for rapid change and innovation. If a firm can operate effectively at this optimal region, described by Professor Eisenhardt as “the Edge of Chaos,” it can thrive in an uncertain and rapidly changing industry.61

A. What (or Where) is the Edge of Chaos?

Complexity Theory focuses on a company balancing on an operational region called “The Edge of Chaos.” This region describes an organizational structure where a firm exercises the perfect balance between structure and chaos. This area is extremely difficult to obtain and achieve because these forces are often diametrically opposed—often a firm must trade perceived unity of focus and hierarchy to foster innovation.
B. Key Features of a Complexity Strategy

The key feature which distinguishes Complexity Theory from more traditional structures is its ability to adapt to rapidly changing environments. This flexibility comes from the relatively loose structure that characterizes systems utilizing this strategy.

Complexity Theory considers a company as a complex, adaptive system. This theory stems from biology, where systems achieve maximum efficiency in an indeterminable and constantly changing environment by self-organizing within a surprisingly loose structure.

Biological functions typically operate as a collection of semi-autonomous entities, with minimal but extremely rigid rules. The small number of rules keeps the entities focused on the long-term strategic goals while allowing for flexibility to innovate and exploit unexpected opportunities. Also, this system allows for rapid shifts in strategy if one path closes or becomes impractical.

Along with the balance between rigidity and flexibility, a key feature of Complexity Theory involves an iterative probing process. Through this process, an entity determines its surroundings and potential areas for growth or utility maximization by using numerous, low-cost, and diverse “probes.”

C. Examples

Since the link from cell mutation behavior to pro bono work in law firms is not obvious at first glance, some examples of other applications of evolutionary theory are useful.

i. Biological Strategy

Ants are often considered the organizational masters of the animal kingdom. Their success seems impossible to quantify when looking at a chaotic mass of individual insects swarming across the landscape. However, we can use complexity theory to see the underlying organizational strategy that leads to a colony’s success.

62 For further examples, including companies that operate at the Edge of Chaos, see id.
Each individual follows few, but extremely rigid rules. The social hierarchy within an ant colony assigns specific jobs to each individual, roles that are strictly maintained. Goals for various search or defense teams are given objectives and search radii through scent pheromones. Within these few structural rules, each ant operates as a semi-autonomous agent of the hive—combining with various numbers and combinations to accomplish changing conditions. Individuals fan out to probe their surroundings until they find the best areas for food. Once these areas that are ripe with opportunity are found, the colony can commit its full resources to exploiting the temporary advantage.

The results seem chaotic, yet there is actually a well orchestrated strategy to accomplish the hive’s mission of survival in a complex and rapidly changing environment.

ii. *The Grateful Dead*

Similarly, the link between the legendary psychedelic rock-band, the Grateful Dead, and law firm strategy certainly seems strange. Yet by using complexity theory, the link becomes clear and insightful. Like any improvisational ensemble, the Grateful Dead’s band members each bring individual sounds through their individual instruments. Without following a set musical score, each individual can contribute their expertise in an instrument to the overall performance. One would think that five musicians playing experimentally and without music would sound completely disorganized and unmelodious. However, beneath the seemingly chaotic structure there are a few, but rigorously followed rules. First, one band member is designated the leader, and controls the pace and ultimate path of the tune. Second, a fixed set of allowable chords are allotted to each member. And third, the tune has a clear start and end.

The rules for the performance are simple, yet this skeletal framework provides sufficient structure to allow for constant innovation. As the melody continues, each semi-autonomous band member continuously probes various chord combinations with ever-changing companion instruments. The music, therefore, constantly evolves (or innovates) within the established framework. Each musician’s musical experiment acts as a probe, sometimes creating effective melodies by combining tangents with other band members which are then followed by the rest of the group. This process of probing within complementary chords to find effective melodies keeps the music innovative and fresh, yet still within the initial framework of the song that began the session. If the band’s structure becomes too rigid, the performance becomes boring and repetitive. Too chaotic, and the music becomes a muddled cacophony with no theme or direction. When the band treads the balance between structure and

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63 Id. at 30-33.
chaos, the result is innovative an innovative musical experience, unified
enough to provide a unity of effort yet varied enough to constantly find new
directions to keep the music fresh.

D. Law Firms, Pro Bono, and the Complexity Theory Framework

Law firms are well structured to take advantage of the Complexity Theory
framework. Firms can not only use this strategic model to become more nimble
and innovative, but also proponents for robust pro bono practices can find a
strong argument for how pro bono work should be considered a strategic asset
rather than a cost.

Law firms are essentially a group of semi-autonomous entities that combine
to form groups in various ways. Traditionally, most firms have organized
according to areas of expertise, often with rather rigid cultural barriers
separating these various practice groups. Occasionally firms even organize
around individual partners, with each partner leading a cadre of trusted
associates that generally work together.

This system does not allow for a nimble response to a rapidly shifting
market. As industry requirements change, some practice groups find
themselves incredibly busy while others sit idle. Instead of organizing in rigid
practice groups, law firms utilizing a Complexity Framework should loosely
organize their lawyers to allow for rapid recombination of expertise in response
to “problems.” The problem-focused organization, rather than the expertise-
focused organization allows the firm to rapidly change combinations of lawyers
in response of shifting industry demands. It also helps to eliminate the partial
merger problem discussed in Part IV by creating a more cooperative and
integrated unity of effort.

Under this approach a firm can straddle the edge of chaos by operating with
minimal but rigid rules (e.g. a process for setting priorities, seniority
requirements to staff certain matters) yet balance this structure with the
flexibility to improve skills and expand flexibility by removing artificial
barriers to innovation (e.g. strict practice group boundaries).

E. Pro Bono’s Critical Role in Complexity Theory

A robust pro bono practice finds its strategic place in Complexity Theory.
Just as Game Theory showed that pro bono could help a firm find and take
advantage of strategic opportunities through external competition, so too can
Complexity Theory provide a similar impetus for changes internal firm
structure.

Pro bono can act as both an innovative force, encouraging a diverse range
of lawyers to collaborate, a unifying “glue” to prevent the partial merger
problem discussed in Part IV, and a welfare increasing training mechanism.
i. **Pro Bono as a cost effective probe**

Pro bono can provide a cost effective mechanism for law firms to probe effective strategic paths. Although the cost for a firm to perform pro bono work is debatable, it generally costs considerably less than a 1:1 loss of billable time. Therefore, pro bono can operate as a cost-effective probing mechanism, allowing the firm to explore the legal strategic landscape—learning new skills, experimenting with new research tools, and sharing abilities across various attorneys. Essentially, this low cost probe option allows the firm to invest (or subsidize) in information.

ii. **Creative externality**

Although it may seem that pro bono work does not directly translate to every lawyer’s individual practice area, the innovative force of pro bono matters can act as a creative externality to spur innovation regardless of practice group. By forming pro bono teams that differ from each attorney’s normal practice, knowledge, techniques, and skills can flow more fluidly throughout the firm. As social barriers erode and information flows more freely, innovation can result in unexpected and not strictly planned for ways. This creative externality can increase the “chaos” side of the complexity equation, improving the firm’s strategic posture.

iii. **Recombination, unity of effort**

By pursuing various pro bono matters, a firm can utilize recombination effects to gain innovation and adaptability. A pro bono practice can typically span the full range of legal services. By involving various attorneys on a wide range of matters, the firm can take strategic advantage of the opportunities that evolve from various teams of attorneys working and learning together.

In the past, firms spent large amounts of money on retreats or parties to artificially encourage increased integration and cooperation. On the other hand, a robust pro bono practice can fill this unifying role (especially with increasing pressure to cut costs) while providing the other strategic value that this Note discussed.

**CONCLUSION**

Law firms are faced with incredible challenges in the rapidly shifting legal market. As pressures increase to cut costs without sacrificing quality or
quantity of services, making a business case for a robust pro bono practice will become increasingly difficult under antiquated strategic frameworks.

However, as the successful firms reorganize and innovate, they will likely recognize the full potential of a pro bono as a strategic asset—not merely for marketing or recruiting campaigns. I hope that this Note will help encourage law firms to rethink their strategy to become more innovate, more nimble, and more committed to pro bono work.